

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of performing power amplification under variable envelope excitation, comprising the steps of:

converting an original input signal at least into a phase modulated signal part;

feeding at least the phase modulated signal part to an input port of an amplifier unit; and

amplifying said at least the phase modulated signal part of said original input signal by dynamically selecting a plurality of fixed power supply units for the amplifier unit, each fixed power supply unit having a different fixed output power, wherein the amplitude content of the original input signal is recreated reconstructed by changing the dynamic selection of the power supply units so as to change dependent on the respective provided power supply a further controllable input signal to of the amplifier unit, in particular at least one of the input power level, and/or the biasing voltage and/or biasing current, of the further controllable input signal supplied to a at the control input of the amplifier unit, during said step of amplifying.

2. (Previously Presented) The method of Claim 1, further characterized in that the dynamical selection of the fixed power supply unit(s) provides different fixed supply currents or supply voltages.

3. (Cancelled)

4. (Currently Amended) The method of Claim 1, further comprising the step of compensating non-linearity by at least one of pre-distorting the power supply for the

amplifier unit and/or by pre-distorting the amplifier unit biasing voltage and/or biasing current at the control input.

5. (Currently Amended) The method of Claim 1, further comprising the step of lowpass filtering of a control signal for providing at least one of a the changeable amplifier unit biasing voltage and/or and a biasing current at the control input with a cut-off frequency close to a the modulation bandwidth of the original input signal.

6. (Original) The method of Claim 1, further comprising the step of converting the original input signal into an amplitude modulated signal part, according to which the input power level is changed.

7. (Currently Amended) A power amplifier comprising;

at least a final amplifier unit;

means for feeding at least a the phase modulated signal part of an original input signal to an the input port of the final amplifier unit;

at least two selectable power supply units with different fixed output powers connected to a the supply port of the final amplifier unit;

means for dynamically selecting a total supply power by selecting the respective power supply units; and

means for controlling an input signal to the final amplifier circuit by charging dependent on the respective selected supply power units, a further amplifier unit input, in particular at least one of the input power level and/or biasing voltage and/or biasing current, at the control input of the amplifier unit.

8. (Currently Amended) The power amplifier of Claim 7, wherein each of the power supply units either comprises a DC/DC converter and/or is connected to the supply port in parallel and/or is selected by a common digital signal processor.

9. (Currently Amended) The power amplifier of Claim 7, wherein a linear regulator is used to control at least one of the amplifiers biasing voltage and/or biasing current at the control input to the amplifier, and/or wherein a control path includes with a lowpass filter for controlling the amplifier unit input biasing voltage and/or biasing current, is comprised.

(10). (Cancelled)